AUTHOR INDEX

Akila, R., 311
Archer, P. B. M., 379
Armstrong, B. M., 225
Audet, S. A., 155, 287

Bayvel, P., 247
Bearzotti, A., 43
Bentley, R. E., 89

Caliendo, C., 43
Campanella, L., 235
Chadwick, A. V., 379
Coles, G., 393

D'Amico, A., 43

Evans, N. J., 255

Fortunato, G., 43
French, P. J., 121
Futata, H., 1

Gamble, H. S., 225
Göpel, W., 167
Gotoh, M., 55

Halttunen, J., 335
Hamakawa, Y., 263
Harvey, I., 393
Hayashi, K., 25
Hetrick, R. E., 197
Hisamoto, J., 301
Hök, B., 67
Huijsing, J. H., 109

Iiyama, S., 25
Ishida, M., 101

Jacob, K. T., 311
Jones, M. G., 215
Jones, R. E., 135

Karube, I., 55
Kimata, M., 263
Kitagawa, H., 369
Klein, C. F., 325
Kodato, S., 209
Kurumiya, Y., 345
Kuwata, S., 301

Lian, W., 121
Lindén, Y., 67
Ling, E., 225
Luntta, E., 335

Maenaka, K., 101
Matsuguchi, M., 359
Miasik, J. J., 379
Miura, N., 301
Moriga, N., 359
Mukode, S., 1

Naden, J. M., 135
Nakamura, T., 101
Nakashima, N., 25
Nakazawa, M., 345
Nevell, T. G., 215
Nuri, K., 345

Oda, S., 55
Ohsakama, T., 101
Okuyama, M., 263
Ozaki, N., 25

Petty, M. C., 255

Regtien, P. P. L., 141
Roberts, G. G., 255
Russell, G. F., 89

Sadaoka, Y., 359
Sakai, Y., 359
Salardenne, J., 301
Sammartino, M. P., 235
Sato, K., 273
Seki, A., 55
Shimada, M., 359
Shimizu, I., 55
Suematsu, K., 273

Tamiya, E., 55
Tamizi, M., 379
Tamura, T., 273
Tenerz, L., 67
ten Kate, W. R. Th., 155, 287
Thoma, P. E., 325
Tirén, J., 67
Togami, Y., 263
Togawa, T., 273
Toko, K., 25
Tomassetti, M., 235

Uematsu, S., 263
Usui, T., 345

van Oudheusden, B. W., 109

Velchev, N. B., 83

Wakefield, J., 225
Watson, J., 393
Wolffenbuttel, R. F., 13, 141
Wright, J. D., 379

Yamafuji, K., 25
Yamazoe, N., 301
Yoshida, T., 25

© Elsevier Sequoia/Printed in The Netherlands

AUTHOR INDEX

Akila, R., 311
Archer, P. B. M., 379
Armstrong, B. M., 225
Audet, S. A., 155, 287

Bayvel, P., 247
Bearzotti, A., 43
Bentley, R. E., 89

Caliendo, C., 43
Campanella, L., 235
Chadwick, A. V., 379
Coles, G., 393

D'Amico, A., 43

Evans, N. J., 255

Fortunato, G., 43
French, P. J., 121
Futata, H., 1

Gamble, H. S., 225
Göpel, W., 167
Gotoh, M., 55

Halttunen, J., 335
Hamakawa, Y., 263
Harvey, I., 393
Hayashi, K., 25
Hetrick, R. E., 197
Hisamoto, J., 301
Hök, B., 67
Huijsing, J. H., 109

Iiyama, S., 25
Ishida, M., 101

Jacob, K. T., 311
Jones, M. G., 215
Jones, R. E., 135

Karube, I., 55
Kimata, M., 263
Kitagawa, H., 369
Klein, C. F., 325
Kodato, S., 209
Kurumiya, Y., 345
Kuwata, S., 301

Lian, W., 121
Lindén, Y., 67
Ling, E., 225
Luntta, E., 335

Maenaka, K., 101
Matsuguchi, M., 359
Miasik, J. J., 379
Miura, N., 301
Moriga, N., 359
Mukode, S., 1

Naden, J. M., 135
Nakamura, T., 101
Nakashima, N., 25
Nakazawa, M., 345
Nevell, T. G., 215
Nuri, K., 345

Oda, S., 55
Ohsakama, T., 101
Okuyama, M., 263
Ozaki, N., 25

Petty, M. C., 255

Regtien, P. P. L., 141
Roberts, G. G., 255
Russell, G. F., 89

Sadaoka, Y., 359
Sakai, Y., 359
Salardenne, J., 301
Sammartino, M. P., 235
Sato, K., 273
Seki, A., 55
Shimada, M., 359
Shimizu, I., 55
Suematsu, K., 273

Tamiya, E., 55
Tamizi, M., 379
Tamura, T., 273
Tenerz, L., 67
ten Kate, W. R. Th., 155, 287
Thoma, P. E., 325
Tirén, J., 67
Togami, Y., 263
Togawa, T., 273
Toko, K., 25
Tomassetti, M., 235

Uematsu, S., 263
Usui, T., 345

van Oudheusden, B. W., 109

Velchev, N. B., 83

Wakefield, J., 225
Watson, J., 393
Wolffenbuttel, R. F., 13, 141
Wright, J. D., 379

Yamafuji, K., 25
Yamazoe, N., 301
Yoshida, T., 25

© Elsevier Sequoia/Printed in The Netherlands

SUBJECT INDEX

β-alumina
/Na_2SO_4 couple, SO_x (x = 2, 3) sensor using, 311
Atomistic models
and research trends; solid-state chemical sensors, 167

Blood pH monitoring
by use of null method, continuous, 27 273
BSO-type crystals
electro-optic coefficient in, with optical activity measurement and application to sensors, 247

Calcium
Li–Te and Ca–Te thin-film junctions as humidity sensors, 369
Catalytic flammable gas sensors
detection of H using, 215
CCD image sensor
pyroelectric infrared-, using $LiTaO_3$, 263
Chemical sensors
solid-state; atomistic models and research trends, 167
Colour filtering element
operation of Si, 13
Contour detection
option, integrated tactile imager with intrinsic, 141

Doping-selective etching (DSE)
fabrication of three-dimensional Si structures by means of, 67

Electret
and Th gas sensors, 325
Electric characteristics
of lipid cast membrane with single pore, effect of taste substances, on, 25
Electromagnetic flow measurement
effect of velocity profile on, 335
Electro-optic coefficient
in BSO-type crystals with optical activity measurement and application to sensors, 247
Environmental chamber
for characterization of gas sensors, development of, 393
Enzyme-entrapping membranes
for enzyme sensors, 235
Enzyme sensors
enzyme-entrapping membranes for, 235

Flip-flop sensor
modelling of, and optical pattern detector, 121
Flow-direction sensor
integrated Si, 109
Fluorine
solid-state O sensor using sputtered LaF_3 film, 301

Gas-polarographic multifunctional sensor
O–humidity sensor, 345
Gas sensor(s)
detection of H using catalytic flammable, 215
development of environmental chamber for characterization of, 393
electret and Rh, 325
organometallic semiconductor, kinetic factors in response of, 379
Germanium
simple high-performance power sensor using μc-Si:Ge thin films, 209

Halltrons
MOS; new relation for their use as sensors, 83
Humidity sensor(s)
Li–Te and Ca–Te thin-film junctions as, 369
O–, gas-polarographic multifunctional sensor, 345
based on organopolysiloxanes having hydrophilic groups, 359
semiconductive, 1
Hydrogen detection
using catalytic flammable gas sensors, 215
Hydrogen gas
effects of on Pd/LB film/Si MIS devices, 255

© Elsevier Sequoia/Printed in The Netherlands

Hydrogen sensitivity
of $Pd/SiO_2/Si$ structure; correlation with H-induced modifications on optical and transport properties of α-phase Pd films, 43

Image sensor
pyroelectric infrared-CCD, using $LiTaO_3$, 263
Imaging radiation
two-dimensional Si sensor for, 155
ISFET
construction of amorphous Si, 55

Kinetic factors
in response of organometallic semiconductor gas sensors, 379

Lanthanum
solid-state O sensor using sputtered LaF_3 film, 301
Lipid cast membrane
with single pore, effect of taste substances on electric characteristics of, 25
Lithium
pyroelectric infrared-CCD image sensor using $LiTaO_3$, 263
–Te and Ca–Te thin-film junctions as humidity sensors, 369

Magnetic-field sensor
vibrating cantilever, 197
Magnetotransistors
experimental investigation of operating principles of vertical, 101
MIS devices
effects of H gas on Pd/LB film/Si, 255
MOS Halltrons
new relation for their use as sensors, 83

Nicrosil
-sheathed mineral-insulated type N thermocouple probes for short-term variable-immersion applications to 1100 °C, 89
Null method
continuous blood pH monitoring by use of, 273

Operating principles
of vertical magnetotransistors, experimental investigation of, 101
Optical activity
measurement and application to sensors, electro-optic coefficient in BSO-type crystals with, 247
Optical pattern detector
modelling of flip-flop sensor and, 121
Optical properties
H sensitivity of $Pd/SiO_2/Si$ structure; correlation with H-induced modifications on, and transport properties of α-phase Pd films, 43
Optically-addressed silicon strain sensor, 135
Organometallic semiconductor gas sensors
kinetic factors in response of, 379
Organopolysiloxanes
humidity sensors based on, having hydrophilic groups, 359
Oxygen sensor
solid-state, using sputtered LaF_3 film, 301
Oxygen–humidity sensor
gas-polarographic multifuntional sensor, 345

Palladium
effects of H gas on Pd/LB film/Si MIS devices, 255
H sensitivity of $Pd/SiO_2/Si$ structure; correlation with H-induced modifications on optical and transport properties of α-phase Pd films, 43
pH monitoring
continuous blood, by use of null method, 273
Power sensor
simple high-performance, using μc-Si:Ge thin films, 209
Pyroelectric infrared
-CCD image sensor using $LiTaO_3$, 263

Rhodium
gas sensors, electret and, 325

Semiconductive humidity sensor, 1
Sensor applications
processing high-purity Si used for, 287
Silicon
colour filtering element, operation of, 13
contruction of amorphous Si ISFET, 55
effects of H gas on Pd/LB film/Si MIS devices, 255
fabrication of three-dimensional Si structures by means of doping-selective etching (DSE), 67

flow-direction sensor, integrated, 109
H sensitivity of $Pd/SiO_2/Si$ structure; correlation with H-induced modifications on optical and transport properties of α-phase Pd films, 43
optically-addressed, strain sensor, 135
processing high-purity, used for sensor applications, 287
sensor for imaging radiation, two-dimensional, 155
simple high-performance power sensor using μc-Si:Ge thin films, 209
temperature sensor, novel polycrystalline, 225
SO_x sensor
using β-alumina/Na_2SO_4 couple, (x = 2, 3), 311
Sodium
SO_x (x = 2, 3) sensor using β-alumina/Na_2SO_4 couple, 311
Strain sensor
optically-addressed Si, 135

Tactile imager
integrated, with intrinsic contour detection option, 141
Tantalum
pyroelectric infrared-CCD image sensor using $LiTaO_3$, 263
Taste substances
effect of, on electric characteristics of lipid cast membrane with single pore, 25
Tellurium
Li–Te and Ca–Te thin-film junctions as humidity sensors, 369
Temperature sensor
novel polycrystalline Si, 225
Thermocouple probes
nicrosil-sheathed mineral-insulated type N, for short-term variable-immersion applications to 1100 °C, 89
Transport properties
H sensitivity of $Pd/SiO_2/Si$ structure; correlation with H-induced modifications on optical and, of α-phase Pd films, 43

Variable-immersion applications
short-term, to 1100 °C, nicrosil-sheathed mineral-insulated type N thermocouple probes for, 89
Velocity profile
effect of, on electromagnetic flow measurement, 335
Vibrating cantilever magnetic-field sensor, 197